

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P937220

Luminaire Tested: SQ4-FB-075U-100D-840-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937220
REPORT IS A COMBINATION OF REPORTS P933519 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-100D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

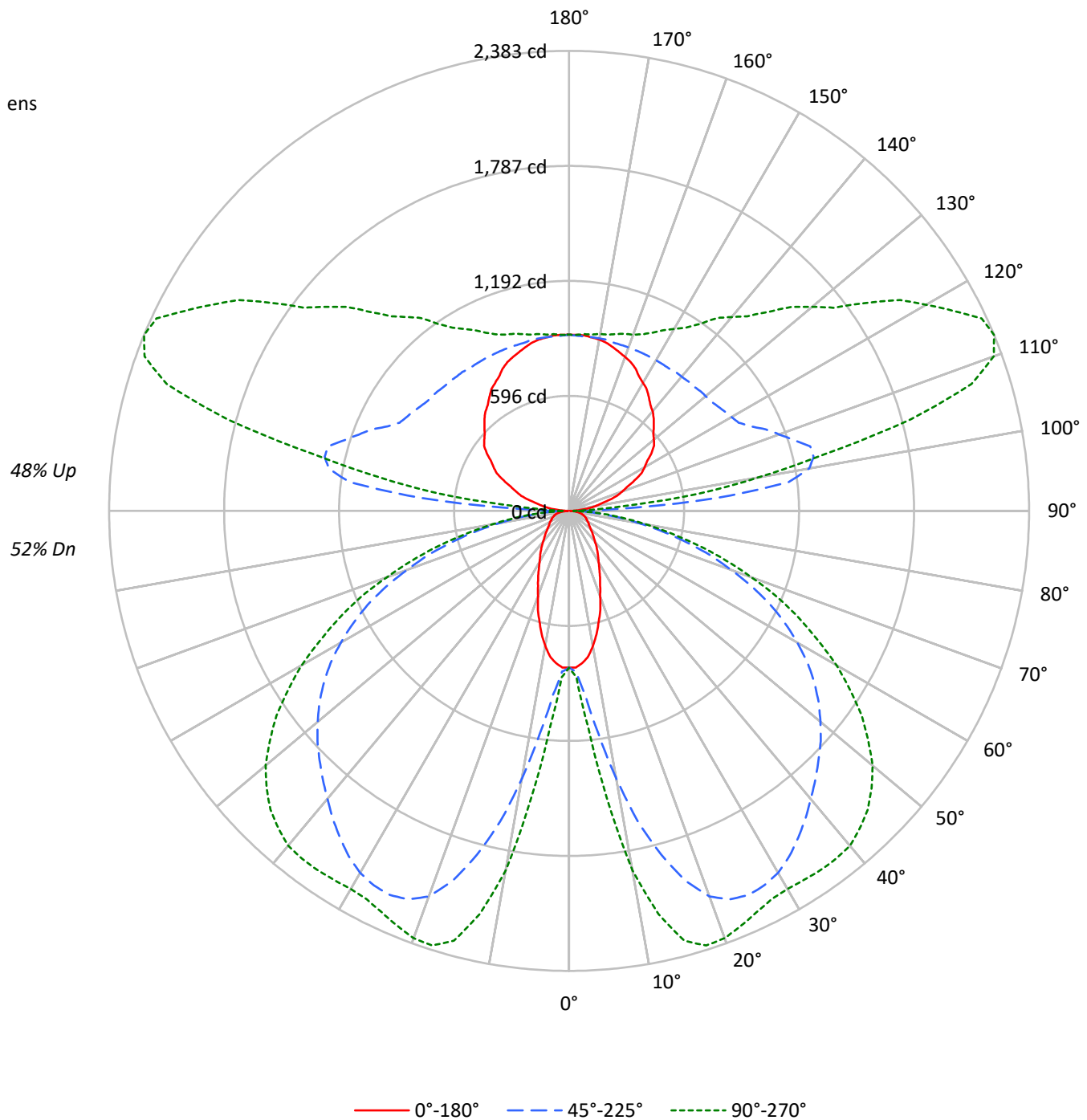
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12201.8 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 102.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P937220
CATALOG NUMBER: SQ4-FB-075U-100D-840-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P937220

CATALOG NUMBER: SQ4-FB-075U-100D-840-1D-UNV-STD-W-8

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	58	58	58	52
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47	47	47	47	42
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39	39	39	39	34
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32	32	32	32	28
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27	27	27	27	24
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23	23	23	23	20
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20	20	20	20	17
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18	18	18	18	15
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16	16	16	16	13
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14	14	14	14	12
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12	12	12	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3767	3767	3767
5°	3680	4354	5064
10°	3339	6347	8395
15°	2837	8292	10137
20°	2310	9610	10331
25°	1927	10056	10121
30°	1625	10120	10102
35°	1437	9952	10363
40°	1252	9733	10634
45°	1134	9573	10675
50°	1040	9430	10498
55°	996	9219	10033
60°	1019	8814	9299
65°	1061	8198	8289
70°	1131	7150	7002
75°	1252	5829	5464
80°	1367	4042	3683
85°	1216	2145	1885

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10675 cd/sqm



TEST NUMBER: P937220

CATALOG NUMBER: SQ4-FB-075U-100D-840-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.0	0.9
10°-20°	465.5	3.8
20°-30°	814.3	6.7
30°-40°	1048.2	8.6
40°-50°	1170.8	9.6
50°-60°	1121.4	9.2
60°-70°	888.7	7.3
70°-80°	522.6	4.3
80°-90°	148.7	1.2
90°-100°	444.9	3.6
100°-110°	1169.6	9.6
110°-120°	1212.8	9.9
120°-130°	972.8	8.0
130°-140°	763.3	6.3
140°-150°	585.9	4.8
150°-160°	421.9	3.5
160°-170°	258.2	2.1
170°-180°	87.2	0.7
0°-30°	1384.8	11.3
0°-40°	2433.1	19.9
0°-60°	4725.3	38.7
0°-90°	6285.2	51.5
90°-120°	2827.3	23.2
90°-150°	5149.3	42.2
90°-180°	5917.0	48.5
0°-180°	12201.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	812	812	812	812	812	
5°	791	849	956	1081	1120	73
15°	593	1094	1843	2235	2306	165
25°	379	1240	2196	2292	2295	174
35°	256	1185	2068	2185	2272	160
45°	175	945	1828	2094	2188	135
55°	125	600	1551	1802	1851	114
65°	99	318	1151	1295	1313	98
75°	73	196	632	695	697	77
85°	26	60	157	172	175	28
90°	6	17	46	23	23	7
95°	59	230	766	395	269	65
105°	211	319	1293	1963	1832	223
115°	374	454	1036	2066	2358	370
125°	521	584	942	1592	1878	462
135°	620	683	913	1285	1457	480
145°	720	766	901	1096	1182	451
155°	813	836	901	989	1018	374
165°	878	889	901	937	948	248
175°	913	913	907	919	919	87
180°	913	913	913	913	913	



TEST NUMBER: P937220

CATALOG NUMBER: SQ4-FB-075U-100D-840-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	812.0	812.0	812.0	812.0	812.0	812.0	812.0	812.0	812.0	812.0	812.0
2.5°	812.0	812.0	817.3	819.8	825.1	827.6	832.9	838.1	853.8	856.4	861.6
5°	791.1	801.6	835.6	848.6	885.1	934.7	955.6	989.6	1060.0	1081.0	1094.0
7.5°	759.8	783.3	866.9	887.7	979.1	1109.6	1164.5	1237.6	1349.9	1404.7	1449.1
10°	710.2	759.8	908.7	958.3	1107.1	1305.4	1407.3	1509.2	1678.8	1754.6	1783.2
12.5°	655.3	736.3	953.0	1020.9	1235.0	1524.8	1647.5	1759.8	1953.0	2054.8	2070.5
15°	592.7	702.4	994.8	1094.0	1370.8	1707.6	1843.3	1981.7	2161.8	2235.0	2253.2
17.5°	537.9	676.3	1033.9	1138.4	1475.2	1872.1	2010.5	2125.3	2271.5	2321.1	2334.2
20°	470.0	634.5	1060.0	1195.8	1584.9	1992.2	2125.3	2214.1	2313.3	2344.6	2349.9
22.5°	420.4	590.0	1075.7	1216.7	1658.0	2065.3	2177.6	2248.0	2316.0	2326.3	2329.0
25°	378.6	540.4	1073.1	1240.2	1720.6	2109.7	2195.8	2248.0	2287.2	2292.5	2292.5
27.5°	339.4	485.6	1062.7	1245.5	1767.6	2120.1	2188.0	2224.6	2242.9	2253.2	2253.2
30°	305.5	433.4	1036.5	1235.0	1788.5	2109.7	2164.5	2182.8	2201.1	2216.7	2224.6
32.5°	279.4	383.8	997.4	1214.1	1791.1	2083.6	2122.7	2133.2	2159.3	2195.8	2208.9
35°	255.9	334.2	953.0	1185.4	1775.4	2041.8	2067.9	2078.4	2130.5	2185.4	2203.6
37.5°	232.4	297.7	895.5	1135.8	1751.9	1992.2	2010.5	2028.8	2109.7	2174.9	2195.8
40°	208.9	266.4	827.6	1081.0	1715.4	1932.1	1947.7	1976.5	2083.6	2159.3	2180.1
42.5°	190.6	240.2	754.5	1023.5	1668.4	1864.3	1887.8	1929.5	2052.2	2133.2	2156.7
45°	175.0	214.1	676.3	945.1	1608.4	1793.7	1827.7	1885.1	2015.6	2094.0	2114.9
47.5°	159.3	195.8	595.3	864.2	1543.1	1723.3	1767.6	1832.9	1966.0	2041.8	2060.1
50°	146.2	177.5	514.4	778.0	1472.6	1647.5	1699.8	1767.6	1903.4	1973.9	1997.3
52.5°	135.8	161.8	438.7	691.9	1391.6	1569.1	1629.2	1699.8	1827.7	1895.6	1911.2
55°	125.3	148.8	373.4	600.5	1308.1	1485.7	1550.9	1618.8	1744.1	1801.5	1812.0
57.5°	120.1	138.4	318.5	514.4	1219.3	1391.6	1464.7	1527.4	1644.9	1689.3	1699.8
60°	112.2	130.5	276.7	441.2	1122.8	1302.9	1365.5	1428.2	1527.4	1564.0	1571.8
62.5°	104.4	125.3	245.4	370.8	1023.5	1198.4	1261.1	1318.6	1402.1	1428.2	1438.6
65°	99.2	120.1	221.9	318.5	921.7	1088.8	1151.4	1201.0	1268.9	1295.1	1300.3
67.5°	94.0	114.9	203.6	274.2	819.8	979.1	1026.1	1073.1	1125.3	1151.4	1154.1
70°	86.2	109.7	188.0	242.9	715.4	853.8	893.0	942.6	984.3	997.4	1005.2
72.5°	80.9	101.9	177.5	219.3	608.3	733.7	770.2	799.0	835.6	848.6	848.6
75°	73.1	91.4	167.1	195.8	498.7	600.5	631.8	660.6	689.3	694.6	686.7
77.5°	65.3	80.9	143.6	164.5	389.1	475.2	501.3	516.9	540.4	545.7	548.3
80°	54.8	70.5	112.2	127.9	282.0	349.9	368.1	381.2	402.1	402.1	407.4
82.5°	41.8	54.8	80.9	91.4	190.6	240.2	255.9	263.7	276.7	276.7	276.7
85°	26.1	34.0	52.3	60.1	114.9	146.2	156.7	159.3	169.7	172.3	172.3
87.5°	13.0	18.3	34.0	36.6	60.1	75.7	75.7	80.9	80.9	78.3	75.7
90°	6.1	11.1	16.0	17.2	27.0	40.0	46.5	41.4	31.0	23.3	23.3
92.5°	24.5	66.2	107.9	118.3	166.3	230.2	262.2	229.8	165.0	116.4	111.7
95°	58.8	135.1	211.2	230.3	408.9	647.1	766.3	683.8	518.8	395.1	381.1
97.5°	101.7	168.9	236.2	253.0	550.9	948.1	1146.7	1094.5	990.3	912.1	885.4
100°	134.8	195.7	256.8	272.0	602.6	1043.3	1263.7	1267.5	1275.1	1280.8	1249.0
102.5°	162.9	219.8	276.7	291.0	626.2	1073.3	1296.8	1363.1	1496.0	1595.7	1568.4
105°	210.7	259.0	307.1	319.1	643.8	1076.6	1293.1	1442.0	1739.8	1963.2	1948.5
107.5°	259.7	304.7	349.6	360.8	647.0	1028.7	1219.6	1427.3	1842.7	2154.3	2157.9
110°	292.8	333.4	373.9	384.0	642.1	986.2	1158.3	1390.5	1855.0	2203.3	2218.6



TEST NUMBER: P937220

CATALOG NUMBER: SQ4-FB-075U-100D-840-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	325.2	363.9	402.5	412.2	642.3	949.2	1102.6	1340.3	1815.6	2172.1	2195.5
115°	374.3	409.9	445.6	454.5	648.2	906.6	1035.8	1264.7	1722.7	2066.1	2098.6
117.5°	422.7	455.1	487.5	495.6	660.4	880.0	989.9	1196.5	1609.7	1919.7	1955.6
120°	450.8	481.3	511.8	519.4	670.1	871.0	971.5	1160.3	1537.9	1821.1	1856.1
122.5°	478.4	509.2	539.9	547.6	684.2	866.3	957.4	1127.4	1467.5	1722.5	1757.0
125°	520.7	548.7	576.7	583.7	703.2	862.4	942.1	1086.5	1375.3	1592.0	1623.8
127.5°	555.0	583.3	611.6	618.7	722.2	860.3	929.2	1053.2	1301.2	1487.2	1514.0
130°	573.3	603.8	634.3	641.9	736.1	861.6	924.4	1034.7	1255.6	1421.1	1445.9
132.5°	592.3	622.8	653.4	661.0	747.3	862.4	920.0	1018.8	1216.5	1364.7	1387.0
135°	620.5	648.2	676.1	683.0	759.6	861.6	912.7	995.5	1161.0	1285.1	1304.3
137.5°	649.3	676.8	704.2	711.2	778.0	867.0	911.4	981.4	1121.4	1226.3	1241.9
140°	673.2	698.5	723.8	730.1	789.1	867.9	907.2	967.6	1088.5	1179.2	1193.8
142.5°	691.6	715.0	738.4	744.3	798.6	871.0	907.2	960.2	1066.4	1146.1	1158.6
145°	719.8	740.2	760.6	765.7	810.9	871.0	901.1	944.5	1031.4	1096.5	1106.0
147.5°	747.9	767.8	787.7	792.7	828.8	876.9	901.1	935.2	1003.5	1054.8	1062.7
150°	766.3	784.3	802.3	806.7	838.1	880.1	901.1	929.9	987.6	1030.9	1037.3
152.5°	785.3	798.9	812.5	815.9	844.2	882.1	901.1	925.7	975.0	1011.9	1016.8
155°	813.4	823.5	833.6	836.1	857.8	886.6	901.1	920.6	959.8	989.3	992.4
157.5°	834.3	844.0	853.8	856.3	871.2	891.1	901.1	916.3	946.8	969.6	971.9
160°	848.4	856.0	863.6	865.5	877.3	893.2	901.1	914.1	940.3	959.8	961.1
162.5°	862.4	868.2	873.9	875.4	884.0	895.3	901.1	912.1	934.2	950.7	951.8
165°	877.7	882.9	888.1	889.4	893.3	898.5	901.1	909.0	924.8	936.6	937.9
167.5°	891.9	894.3	896.8	897.4	900.7	905.0	907.2	912.3	922.7	930.5	931.0
170°	901.1	903.5	906.0	906.6	906.8	907.1	907.2	912.3	922.7	930.5	930.5
172.5°	906.0	906.5	907.1	907.2	907.2	907.2	907.2	911.2	919.4	925.6	925.1
175°	912.7	912.7	912.7	912.7	910.8	908.4	907.2	909.8	915.0	918.8	918.8
177.5°	912.7	912.7	912.7	912.7	911.2	909.4	908.4	910.4	914.5	917.6	917.1
180°	912.7	912.7	912.7	912.7	912.7	912.7	912.7	912.7	912.7	912.7	912.7



TEST NUMBER: P937220

CATALOG NUMBER: SQ4-FB-075U-100D-840-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	812.0	812.0
2.5°	866.9	861.6
5°	1114.9	1120.1
7.5°	1501.3	1498.7
10°	1866.8	1890.3
12.5°	2133.2	2138.4
15°	2295.0	2305.5
17.5°	2357.7	2360.3
20°	2360.3	2355.1
22.5°	2331.6	2326.3
25°	2297.7	2295.0
27.5°	2266.3	2268.9
30°	2253.2	2261.1
32.5°	2253.2	2266.3
35°	2258.5	2271.5
37.5°	2255.9	2271.5
40°	2245.4	2263.7
42.5°	2216.7	2229.7
45°	2172.3	2188.0
47.5°	2114.9	2125.3
50°	2041.8	2052.2
52.5°	1950.4	1953.0
55°	1840.7	1851.2
57.5°	1723.3	1725.8
60°	1592.7	1600.6
62.5°	1454.3	1454.3
65°	1308.1	1313.3
67.5°	1156.7	1169.7
70°	1002.6	1005.2
72.5°	851.2	851.2
75°	694.6	697.1
77.5°	545.7	545.7
80°	404.7	407.4
82.5°	279.4	284.6
85°	175.0	175.0
87.5°	80.9	73.1
90°	23.3	23.3
92.5°	93.3	74.7
95°	325.1	268.9
97.5°	778.6	671.9
100°	1122.0	994.8
102.5°	1459.6	1350.7
105°	1889.9	1831.5
107.5°	2172.0	2186.1
110°	2279.6	2340.6



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CATALOG NUMBER: SQ4-FB-075U-100D-840-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2289.1	2382.8
115°	2228.4	2358.3
117.5°	2099.7	2243.7
120°	1996.1	2136.0
122.5°	1895.0	2033.0
125°	1750.9	1878.1
127.5°	1621.3	1728.6
130°	1544.9	1644.0
132.5°	1475.7	1564.4
135°	1380.7	1457.2
137.5°	1304.6	1367.2
140°	1252.4	1310.9
142.5°	1209.0	1259.4
145°	1144.1	1182.2
147.5°	1094.2	1125.8
150°	1062.9	1088.5
152.5°	1036.0	1055.4
155°	1005.3	1018.0
157.5°	980.9	989.9
160°	966.4	971.5
162.5°	956.8	961.7
165°	943.0	948.2
167.5°	933.2	935.3
170°	930.5	930.5
172.5°	923.2	921.3
175°	918.8	918.8
177.5°	914.9	912.7
180°	912.7	912.7



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	5.75	6.66	6.69	7.62	8.87	18.93	19.84	19.87	20.80	22.05
	3H	6.46	7.28	7.41	8.25	9.52	20.77	21.60	21.72	22.56	23.83
	4H	6.76	7.54	7.72	8.51	9.79	21.42	22.20	22.38	23.17	24.45
	6H	7.01	7.73	7.99	8.71	10.00	21.85	22.57	22.83	23.55	24.84
	8H	7.08	7.77	8.06	8.76	10.05	21.98	22.66	22.96	23.66	24.95
	12H	7.10	7.76	8.09	8.75	10.06	22.05	22.70	23.03	23.69	25.00
4H	2H	12.97	13.75	13.94	14.72	16.00	19.21	19.99	20.18	20.96	22.24
	3H	14.55	15.20	15.52	16.20	17.49	21.26	21.91	22.24	22.92	24.21
	4H	14.64	15.24	15.63	16.23	17.55	22.03	22.63	23.02	23.62	24.94
	6H	14.66	15.17	15.65	16.19	17.50	22.57	23.09	23.57	24.11	25.42
	8H	14.63	15.12	15.63	16.13	17.46	22.74	23.22	23.74	24.23	25.56
	12H	14.59	15.03	15.61	16.06	17.39	22.83	23.27	23.85	24.30	25.63
8H	4H	16.09	16.57	17.09	17.59	18.91	22.10	22.58	23.10	23.59	24.92
	6H	16.34	16.74	17.36	17.79	19.12	22.73	23.13	23.75	24.18	25.51
	8H	16.36	16.71	17.39	17.75	19.09	22.95	23.30	23.98	24.34	25.69
	12H	16.33	16.64	17.36	17.67	19.06	23.10	23.41	24.13	24.44	25.83
12H	4H	16.24	16.67	17.26	17.70	19.04	22.05	22.49	23.07	23.51	24.85
	6H	16.60	16.95	17.63	17.99	19.33	22.71	23.06	23.74	24.10	25.45
	8H	16.67	16.98	17.71	18.01	19.40	22.94	23.25	23.98	24.29	25.68